OSQ Series
OSQW™ LED Wall Mount Luminaire

Product Description

The OSQW™ LED wall mount luminaire has a slim, low profile design intended for outdoor wall mounted applications. The rugged lightweight aluminum housing and mounting box are designed for installation over standard single gang J-Boxes and mud ring single gang J-Boxes. The luminaire allows for through-wired or conduit entry from the top, bottom, sides and rear. The housing design is intended specifically for LED technology including a weathertight LED driver compartment and thermal management. Optic design features industry-leading NanoComfort Technology which provides superior glare reduction and visual comfort with high-efficiency illumination delivered precisely where it is needed.

Applications: General area and security lighting

Performance Summary

Utilizes Patented NanoComfort® Technology

Utilizes Cree TrueWhite® Technology on 5000K Luminaires

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: Up to 8,600

Input Power: 16 - 55 watts

Efficacy: Up to 159 LPW

CRI: Minimum 70 CRI (2700K, 3000K, 4000K & 5700K); 90 CRI (5000K)

CCT: 2700K, 3000K, 4000K, 5000K, 5700K

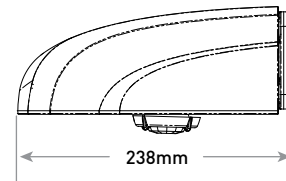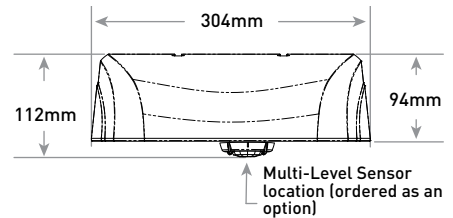**Limited Warranty†:** 10 years for luminaire/10 years for Colorfast DeltaGuard® finish/5 years for BML and ML sensors/1 year for accessories

†See https://www.creelighting.com/resources/warranties/ for warranty terms.

Accessories

Field-Installed
Beauty Plate WM-PLT12** - 12" (305mm) Square WM-PLT14** - 14" (356mm) Square - Covers holes left by incumbent wall packs

** Must specify color

Dimensions

304mm

112mm

94mm

Multi-Level Sensor location (ordered as an option)

238mm

Luminaire	Weight
Standard	4.1kg

Ordering Information

Example: OSQW-C-2L-27K7-2M-UL-WM-BK

OSQW	C								
Family	Series	Lumen Package*	CCT/CRI	Optic	Voltage	Mounting	Finish	Controls**	Options
OSQW	**C**	**2L** 2,550 lumens - Available only with UL voltage **4L** 4,020 lumens **6L** 6,075 lumens **8L** 8,600 lumens	**27K7** 2700K, 70 CRI **30K7** 3000K, 70 CRI **40K7** 4000K, 70 CRI **50K9** 5000K, 90 CRI **57K7** 5700K, 70 CRI	**2M** Type II Mid **3M** Type III Mid **4M** Type IV Mid	**UL** Universal 120-277V	**WM** Wall	**BK** Black **BZ** Bronze **SV** Silver **WH** White	**ML Multi-Level** - Refer to ML spec sheet for details - Utilizes a multifunction sensor - Available only with UL voltage - Not available with other controls or EB option **P Button Photocell** - Available with UL and 34 voltages only - Not available with other controls or EB option **DL DALI** - Contact ADLT for more information	**20KV 20kV/10kA Surge Suppression** - Replaces standard 10kV/5kA

* Lumen Package codes identify approximate light output only. Actual lumen output levels vary depending on CCT selection. Refer to Initial Delivered Lumen tables for specific lumen values.
** Luminaire comes standard with 0-10V dimming. Controls by others.

Product Specifications

CREE LIGHTING NANOCOMFORT® TECHNOLOGY

Cree Lighting's NanoComfort® Technology ends the trade-offs in outdoor lighting by providing superior glare reduction and visual comfort in high-efficiency illumination delivered precisely where it is needed. The basic building block of NanoComfort® Technology is a compact 4x4 array of LEDs. Each of the 16 LEDs in a module is in contact with its own acrylic polymer lens to capture and precisely direct light. With NanoComfort® Technology, the acrylic optics are cut and sculpted into facets that relieve the glare and harshness while improving visual comfort – all while retaining superb efficacy and control.

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIALS

- Slim, low profile design
- Luminaire housing specifically designed for LED applications with advanced LED thermal management and driver
- Acrylic optic w/clear tempered glass lens
- Some versions are provided with full circuit board, but not fully populated with LEDs or optics to scale back lumen package
- Luminaire mounting box designed for installation over standard single gang J-Boxes and mud ring single gang J-Boxes
- Luminaire can also be direct mounted to a wall and surface wired
- Includes (4) 3/16" mounting holes for customer supplied hardware. Select hardware appropriate for mounting surface
- Conduit entry from top, bottom, sides, and rear
- Exclusive Colorfast DeltaGuard® finish features an E-coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Silver, black, white and bronze are available
- **Weight:** Standard - 9.0 lbs. (4.1kg); Emergency - 10.0 lbs. (4.5kg)
- Includes QR code on back plate which provides access to: Online installation instructions, Luminaire information (Part number, Serial number, Build date, and Warranty end date), and Warranty claim submission form
- Duplicate 1" and 2" QR code labels are included. 1" labels can be affixed inside pole bases, next to fixtures, on site plans, or in maintenance records. 2" labels can be scanned from the ground when placed at an appropriate height

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV/5kA surge suppression protection standard; 20kV/10kA surge suppression protection optional
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Dims to 10%. Controls by others
- 0-10V ANSI C137.1-2019 (8-Volt)
- **Maximum 10V Source Current:** 1 mA
- Refer to Dimming spec sheet for details
- **Operating Temperature Range:** -40˚C - +50˚C (-40˚F - +122˚F); Minimum operating temperature with EB option: -20˚C (-4˚F)

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Designed for downlight applications only
- UL924 (EB Option) Maximum mounting height: 20.0'(6.1m)
- Enclosure rated IP66 per IEC 60598
- ANSI C136.2 10kV/5kA (standard) and 20kV/10kA (optional) surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards

- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Lens meets IK09 requirements per IEC 60068-2
- Assembled in the USA by Cree Lighting from US and imported parts
- RoHS compliant. Consult factory for additional details
- DarkSky Approved when ordered with 27K7 or 30K7 CCTs. Please refer to https://darksky.org/what-we-do/darksky-approved/products-companies/#!/~/search/keyword=cree for most current information

Electrical Data*

Lumen Package	System Watts 120-480V**	System Watts						EB System Watts 120-277V	Total Current (A)			
		120V	208V	240V	277V	347V**	480V**		120V	208V	240V	277V
2L	16	0.13	0.08	0.07	0.06	N/A	N/A	19	0.16	0.09	0.08	0.07
4L	27	0.22	0.13	0.11	0.10	0.08	0.06	30	0.24	0.14	0.12	0.11
6L	40	0.34	0.19	0.17	0.14	0.12	0.08	43	0.36	0.21	0.18	0.16
8L	55	0.47	0.27	0.23	0.20	0.16	0.12	58	0.49	0.28	0.24	0.21

* Electrical data at 25˚C (77˚F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347- 480V +/- 10%.
** 2L lumen package is only available with 120-277V.

OSQW Series Ambient Adjusted Lumen Maintenance Factors[1]

Ambient	Lumen Package	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Reported[2] LMF	100K hr Reported[2] LMF
5˚C	2L	1.02	0.99	0.97	0.94	0.92
	4L-8L	1.02	0.99	0.93	0.88	0.83
10˚C	2L	1.02	0.99	0.96	0.94	0.91
	4L-8L	1.02	0.98	0.93	0.87	0.82
15˚C	2L	1.01	0.98	0.96	0.93	0.91
	4L-8L	1.01	0.98	0.92	0.87	0.82
20˚C	2L	1.01	0.97	0.95	0.93	0.90
	4L-8L	1.01	0.97	0.92	0.86	0.81
25˚C	2L	1.00	0.97	0.94	0.92	0.90
	4L-8L	1.00	0.97	0.91	0.86	0.81
30˚C	2L	0.99	0.96	0.94	0.91	0.89
	4L-8L	0.99	0.96	0.90	0.85	0.80
35˚C	2L	0.99	0.96	0.93	0.91	0.89
	4L-8L	0.99	0.95	0.90	0.85	0.80
40˚C	2L	0.98	0.95	0.93	0.90	0.88
	4L-8L	0.98	0.95	0.89	0.84	0.79
45˚C	2L	0.98	0.95	0.92	0.90	0.87
	4L-8L	0.98	0.94	0.89	0.84	0.79
50˚C	2L	0.97	0.94	0.91	0.89	0.87
	4L-8L	0.97	0.94	0.88	0.83	0.79

[1] Lumen maintenance values at 25˚C (77˚F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Zone Reference Document for outdoor average nighttime ambient conditions.
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

Delivered Emergency Lumens

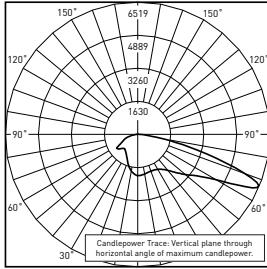| Lumen Package	CCT/CRI			
	2700K/3000K, 70 CRI	4000K, 70 CRI	5000K, 90 CRI	5700K, 70 CRI
2L	1,070	1,120	810	1,120
4L	1,000	1,040	760	1,040
6L	1,020	1,060	780	1,060
8L	1,110	1,160	800	1,160

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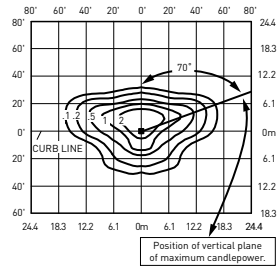## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult:
https://www.creelighting.com/products/outdoor/wall-mount/osq-series-2/

2M

RESTL Test Report #: PL18035-001A
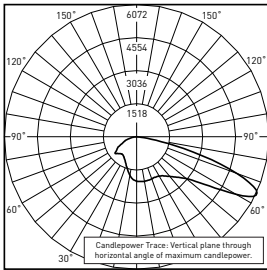OSQW-C-8L-30K7-2M-UL-WM-WH
Initial Delivered Lumens: 8,577

OSQW-C-4L-40K7-2M-Ux-WM-xx-xx
Mounting Height: 15' (4.6) A.F.G.
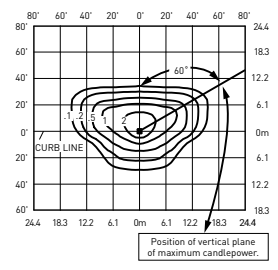**Initial Delivered Lumens:** 4,020
Initial FC at grade

Type II Mid Distribution

Lumen Package	2700K/3000K, 70CRI		4000K, 70CRI		5000K, 90CRI		5700K, 70CRI	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
2L	2,450	B1 U0 G1	2,550	B1 U0 G1	1,860	B1 U0 G1	2,550	B1 U0 G1
4L	3,870	B1 U0 G1	4,020	B1 U0 G1	2,940	B1 U0 G1	4,020	B1 U0 G1
6L	5,825	B1 U0 G1	6,075	B1 U0 G1	4,430	B1 U0 G1	6,075	B1 U0 G1
8L	8,250	B2 U0 G2	8,600	B2 U0 G2	6,275	B1 U0 G1	8,600	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens.
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf.

3M

RESTL Test Report #: PL18036-001A
OSQW-C-8L-30K7-3M-UL-WM-WH
Initial Delivered Lumens: 8,543

OSQW-C-4L-40K7-3M-Ux-WM-xx-xx
Mounting Height: 15' (4.6) A.F.G.
Initial Delivered Lumens: 4,020
Initial FC at grade

Type III Mid Distribution

Lumen Package	2700K/3000K, 70CRI		4000K, 70CRI		5000K, 90CRI		5700K, 70CRI	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
2L	2,450	B1 U0 G1	2,550	B1 U0 G1	1,860	B1 U0 G1	2,550	B1 U0 G1
4L	3,870	B1 U0 G1	4,020	B1 U0 G1	2,940	B1 U0 G1	4,020	B1 U0 G1
6L	5,825	B1 U0 G1	6,075	B1 U0 G1	4,430	B1 U0 G1	6,075	B1 U0 G1
8L	8,250	B2 U0 G2	8,600	B2 U0 G2	6,275	B1 U0 G1	8,600	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens.
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf.

Advanced Lighting Technologies Australia Inc
Advanced Lighting Technologies New Zealand Ltd
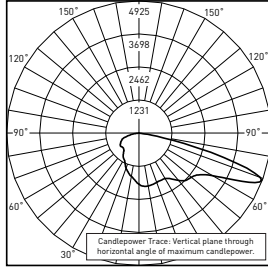Advanced Lighting Technologies Asia Pte Ltd

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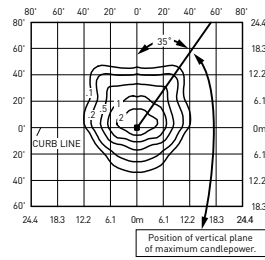Singapore   +65 6844 2338   www.adlt.com.sg

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Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult:
https://www.creelighting.com/products/outdoor/wall-mount/osq-series-2/

4M

RESTL Test Report #: PL18037-001A
OSQW-C-8L-30K7-4M-UL-WM-WH
Initial Delivered Lumens: 8,441

OSQW-C-4L-40K7-4M-Ux-WM-xx-xx
Mounting Height: 15' (4.6) A.F.G.
Initial Delivered Lumens: 4,020
Initial FC at grade

Type IV Mid Distribution

Lumen Package	2700K/3000K, 70CRI		4000K, 70CRI		5000K, 90CRI		5700K, 70CRI	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
2L	2,450	B1 U0 G1	2,550	B1 U0 G1	1,860	B1 U0 G1	2,550	B1 U0 G1
4L	3,870	B1 U0 G1	4,020	B1 U0 G1	2,940	B1 U0 G1	4,020	B1 U0 G1
6L	5,825	B1 U0 G1	6,075	B1 U0 G1	4,430	B1 U0 G1	6,075	B1 U0 G1
8L	8,250	B2 U0 G2	8,600	B2 U0 G2	6,275	B1 U0 G1	8,600	B2 U0 G2

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens.
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf.

Replacement Parts

EB Replacement Kit
OSQW-C-EBKIT
- Suitable for use with all lumen packages and UL voltage

Back Box Replacement Kit
OSQW-C-JBOXKIT
- Suitable for use with all OSQW-C luminaires

Driver Replacement Parts

Product	Lumen Package	Voltage
OSQW-C-DVRKT	**2L** 2,550 Lumens - Available only with UL voltage **4L** 4,020 Lumens **6L** 6,075 Lumens **8L** 8,600 Lumens	**UL** 120-277V

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